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| 10/585,826 | 10/12/2007 | Michael Albertus Burger | 2005-1040 | 6447 |

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| EXAMINER |
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NGUYEN, CAMTU TRAN

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| ART UNIT | PAPER NUMBER |
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3772

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02/23/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

| | | | |
|------------------------------|--------------------------------------|-------------------------------------------------|--|
| Office Action Summary | Application No. 10/585,826 | Applicant(s) BURGER, MICHAEL ALBERTUS | |
| | Examiner Camtu T. Nguyen | Art Unit 3772 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 7,8,17 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>7-12-06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the conductive signal sensor (claim 6 & 18) and conductive wire (claims 7 & 19) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Claim Objections

Claims 8 & 17 are objected to because they both recite **at least a part of the bio-feedback system is accommodated**, is this **part of the bio-feedback system** different from or same as the part of the bio-feedback system in claim 1?

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regards to claim 16, applicant asserts that the claim element "**conversion means**" is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, it is unclear whether the claim element is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph, because such recitation does not recite a "means for" or a "step for".

If applicant wishes to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant is required to:

(a) Amend the claim to include the phrase "means for" or "step for" in accordance with these guidelines: the phrase "means for" or "step for" must be modified by functional language and the phrase must **not** be modified by sufficient structure, material, or acts for performing the claimed function; or

(b) Show that the claim limitation is written as a function to be performed and the claim does **not** recite sufficient structure, material, or acts for performing the claimed function which would preclude application of 35 U.S.C. 112, sixth paragraph. For more information, see MPEP 2181.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 8, 14, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Dworkin (U.S. Patent No. 4,842,519).

Dworkin discloses in Figures 1-6 an intraoral device (10) intended to be received in a user's mouth, the device (10) comprising a carrier (16), the carrier (16) comprises at least a circuit (12), of which is a part of a electronic bio-feedback system, Figure 2 illustrates the carrier (16) is of a jaw-shape body and lies against the outer side of the user's jaw and therein leave the chewing/cutting surface of the user's jaw clear.

Regarding the term "adapted to" in claims 1 and 4, it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires to ability to so perform. It does not constitute a limitation in a patentable sense. In re Hutchison, 69 USPQ 138. As such, the Dworkin's jaw-shape body carrier (16) is capable of lying against at least a part of the outer side of the user's jaw and of entering into an at least temporary fixation of the user's jaw element.

Regarding claim 4, Dworkin discloses carrier (16) is secured temporary fixation with the user's teeth by anchor members (40, 42).

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Regarding claim 8, the carrier (16) comprises an outer shell (14) in which the circuit (12) is accommodated, and an inner shell (40, 42) which is formed at least close-fittingly with the user's teeth.

Regarding claim 14, the carrier (16) is provided with a power supply (column 4 lines 64-66).

Regarding claim 17, Figure 2 illustrates the carrier (16) is intended to be permanently connected to the user's teeth during the time of the procedure.

Claims 1-4, 6, 8, 14, 17, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Matz (U.S. Patent No. 5,586,562).

Matz discloses a device (10) for sensing/treating bruxism, Figure 1 illustrates the device (10) comprising a carrier (12, 34) comprises a jaw-shaped body which comprises at least a part of an electronic bio-feedback system (42), the jaw-shaped body carrier (12, 34) is secured to the outer surface of the tooth (column 2 lines 62-64). Figure 2 illustrates the jaw-shaped body carrier (12, 34) leave a chewing/cutting surface at least substantially clear.

Regarding claim 2, Matz discloses the device is of a resilient compressible material such as rubber or plastic material (column 2 lines 53-55).

Regarding claim 3, Matz's material is permanently deformable at an increased temperature below about 100°C.

Regarding claim 4, Figure 1 illustrates at least one anchor member (42) which extends from the jaw-shaped body carrier (12) and is able & adapted to enter into an at least temporary fixation with the user's jaw.

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Regarding claim 6 reciting a signal sensor, the Matz discloses a signal sensor in the form of an alarm mechanism (84) of which is electrically conductive and is a part of the bio-feedback system.

Regarding claims 8 & 20, the jaw shaped body carrier (12, 34) comprises an outer shell (14) in which a part of the bio-feedback system (42, 80, 82, 84) are accommodated and an inner shell (50) which is formed at least close-fittingly with at least the part of the jaw (202) of the user, see Figure 2.

Regarding claim 14, Figure 1 illustrates an electric power source (80).

Regarding claim 17, the carrier (12, 34) is intended to be permanently connected to the user's teeth during the time of the procedure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matz (U.S. Patent No. 5,586,562) in view of Fischell (U.S. Patent No. 3,867,950).

Matz, as presented above with respect to claims 1 & 14, substantially discloses a device (10) for sensing/treating bruxism, the device (10) comprising all of the elements as recited in these claims including a power source (80). The Matz device is a medical device that is for treating the body (i.e. jaw) of a person and is held within the mouth.

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Matz does not specifically its power source (80) comprises at least one wirelessly rechargeable battery which is arranged in liquid-tight manner in the carrier (14, 34).

Fischell discloses in Figure 1 a pacer that includes a rechargeable battery (15). Figure 11 illustrates the rechargeable battery (15) is in liquid tight arrangement. Figure 1 illustrates an external charger (28) for wirelessly recharging the battery (15). The pacer of Fischell is an implantable medical treatment device.

Therefore, at the time of the invention, it would have been obvious to one skilled in the art to replace the Matz's power source (80) at the time of the invention with a wireless rechargeable battery (15), taught by Fischell, as using charging unit (28) as such would minimize disruption.

Claims 5, 9, 10, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matz (U.S. Patent No. 5,586,562) in view of Burger et al (U.S. Patent No. 5,553,626).

Matz, as presented above in the rejection of claims 1 & 8, substantially discloses a device (10) for sensing/treating bruxism, the device (10) comprising all of the elements as recited in these claims including an anchor (42). The Matz device is a medical device that is for treating the body (i.e. jaw) of a person and is held within the mouth.

Regarding claims 5 & 9, the Matz reference does not teach the anchor (42) comprises an electrically conductive electrode.

Burger et al discloses an anti bruxism device (1) comprising a splint (2) to be secured to user's tooth and a bio-feedback system (see abstract), the splint (2) comprises anchors (3)

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conducting electrical impulses, hence, serving as electrodes. Burger et al illustrates the electrodes (3) extends from outer shell and lies against the user's jaw.

Therefore, at the time of the invention it would have been obvious to one skilled in the art to replace the bio-feedback system in Matz device and substitute it with the bio-feedback system, taught by Burger et al, as such electrical pulses provides effective sensing in treating bruxism.

Regarding claim 10, in the Matz/Burger et al combination, specifically the Burger et al reference teaches the anchors (3) of electrode are orthodontia conducting metal, of which are of resilient construction.

Regarding claim 18 reciting a signal sensor, the combination of Matz/Burger discloses a signal sensor in the form of an alarm mechanism (84) of which is electrically conductive and is a part of the bio-feedback system as is taught by Matz.

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matz (U.S. Patent No. 5,586,562) in view of Karell (U.S. Patent No. 5,792,067).

Matz, as presented above with respect to claim 1, substantially discloses a device (10) for sensing/treating bruxism, the device (10) comprising all of the elements as recited in these claims including the carrier (12, 34) with a first part but the Matz device does not teach a second part of the bio-feedback system (42, 80, 82, 84) is placed outside the mouth.

Karell discloses an oral device (10) comprising carrier (22) having a bio-feedback system (16, 36). Figure 5 illustrates the bio-feedback system (36) is placed outside the mouth (column 5 lines 49-59).

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Therefore, it would have been obvious to one skilled in the art to modify the Matz device such that a second part of its bio-feedback system is placed outside mouth, taught by Karell, for purposes of reducing the risk of misplacement.

Regarding claim 12, in Matz/Karell combination, Figure 5 in the Karell reference illustrates a connecting cable (18). As such, at time of the invention, it would have been obvious to one skilled in the art to modify the Matz/Karell such that cable (18) from the Matz's carrier (12, 34) on the outer side of the teeth in Matz/Karell device.

Regarding claim 13, in Matz/Karell combination, specifically the Karell discloses optionally, in Figures 7 & 8 illustrating the second part of the bio-feedback system (36, 42), comprises intangible communication element such as electromagnetic signals that travel through space (column 6 lines 27-47) or wireless. As such, it would have been obvious to one skilled in the art to utilized the wireless feature taught by Karell in Matz/Karell device for purposes of being wireless/mobile.

Allowable Subject Matter

Claims 7 & 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Burger of EP 1 110 518 A1 discloses an anti-bruxism device comprising a splint (1) fixed to the user's teeth by anchors (5, 6) of electrically conductive wire but does teach the electrically conductive wire with a solid core of bio-compatible metal.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Camtu T. Nguyen whose telephone number is 571-272-4799. The examiner can normally be reached on (M-F) 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on 571-272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Camtu T. Nguyen/
Examiner, Art Unit 3772

/Patricia Bianco/
Supervisory Patent Examiner, Art Unit 3772